ABSTRACT

When set values of a wavelength and a output level are input, the input set values (of the wavelength and the output level) are collated with data (A), and then, an approximate temperature of a DFB laser is calculated. The calculated approximate temperature is collated with data (B), and then, a output regulation value of the DFB laser is calculated. The input set value (the output level) is added to the power regulation value, and then, an optical output controlling value is calculated. The optical output level of the DFB laser is controlled. The optical output controlling value and the input set value (of the wavelength) are collated with the data (A), and then, a temperature controlling value of the DFB laser is calculated. Consequently, the temperature of the DFB laser is controlled.